R E M A R K S

Careful review and examination of the subject application are noted and appreciated.

SUPPORT FOR THE CLAIM AMENDMENTS

Support for the claim amendments may be found in the specification, for example, on page 5 line 4-page 6 line 9, page 8 lines 14-18, page 9 lines 1-12 and FIGS. 1-3, as originally filed. Thus, no new matter has been added.

CLAIM REJECTIONS UNDER 35 U.S.C. §102

The rejection of claims 1-3, 7 and 9-20 under 35 U.S.C. §102(b) as being anticipated by Sun et al., WO 98/19234; (hereinafter Sun) has been obviated by appropriate amendment and should be withdrawn.

Sun is directed to a processor with embedded in-circuit programming structures (Title).

Claim 1 provides a communication engine configured to receive programming data over one or more data lines when in a second mode and a programming circuit configured to (i) receive the program data from the communication engine and (ii) write the program data to a memory. In contrast, Sun appears to be silent regarding programming data flowing from a serial port through a micro-controller 11 to an erase/program port 36 and finally to a

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flash memory 16 or 17. Sun appears to contemplate the programming data bypassing the micro-controller 11 on the normal ERS/PGM path 20. Therefore, Sun does not teach or suggest a communication engine configured to receive programming data over one or more data lines when in a second mode and a programming circuit configured to (i) receive the program data from the communication engine and (ii) write the program data to a memory as presently claimed. As such, claim 1 is fully patentable over the cited reference and the rejection should be withdrawn.

Claim 11 provides a steps for (A) transferring normal data through one or more data lines when in a first mode, (B) transferring the normal data through the data lines when in a second mode in response to receiving an enable signal and (D) programming a microcontroller through the data lines when in a third mode. In contrast, Sun appears to be silent regarding the micro-controller 11 receiving data on the ports 12 and/or 13 in three modes. Therefore, Sun does not disclose or suggest steps for (A) transferring normal data through one or more data lines when in a first mode, (B) transferring the normal data through the data lines when in a second mode in response to receiving an enable signal and (D) programming a microcontroller through the data lines when in a third mode as presently claimed. Claim 10 provides language similar to claim 11. As such, claims 10 and 11 are fully

patentable over the cited reference and the rejection should be withdrawn.

Regarding claim 12, Applicants' representative respectfully traverses the assertion on page 3 of the Office Action that determining if a programming state is enabled is inherent to performing programming. MPEP §2112 states:

> "In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic <u>necessarily</u> flows from the teachings of the applied prior art. " *Ex parte Levy* 17 USPQ2d 1461, 1464, 1464 (Bd. Pat. App. & Inter. 1990)(emphasis in original)

In contrast, the Office Action provides no basis in fact or technical reasoning to support the conclusion of inherency. The assertion to "produce predictable and reliable results" appears to be merely an objective. As such, *prima facie* anticipation has not been established and the rejection of claim 12 should be withdrawn.

CLAIM REJECTIONS UNDER 35 U.S.C. §103

The rejection of claims 5 and 6 under 35 U.S.C. §103(a) as being unpatentable over Sun has been obviated by appropriate amendment and should be withdrawn.

The rejection of claims 4 and 8 under 35 U.S.C. §103(a) as being unpatentable over Sun in view of Schmidt (U.S. Patent Application 2002/0196029) has been obviated by appropriate amendment and should be withdrawn.

Claims 4, 5, 6 and 8 depended either directly or indirectly from independent claim 1, which is now believed to be allowable. As such, the presently pending invention is fully patentable over the cited references and the rejections should be withdrawn.
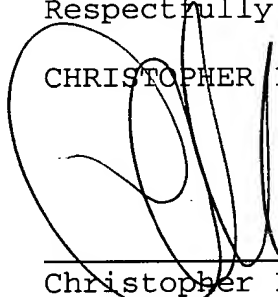
Accordingly, the present application is in condition for allowance. Early and favorable action by the Examiner is respectfully solicited.

The Examiner is respectfully invited to call the Applicants' representative should it be deemed beneficial to further advance prosecution of the application.

If any additional fees are due, please charge our office Account No. 50-0541.

Respectfully submitted,

CHRISTOPHER P. MAIORANA, P.C.

Christopher P. Maiorana
Registration No. 42,829
24840 Harper Avenue, Suite 100
St. Clair Shores, MI 48080
(586) 498-0670

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